

CLAIMS

What is claimed is:

Claim 1. A method for updating an electronic device, the method comprising:

 updating at least one of firmware and software in the electronic device using update information; and

 converting data associated with the at least one of firmware and software to a form compatible with an updated version of the at least one of firmware and software.

Claim 2. The method according to claim 1, further comprising retrieving a list of names of converter utilities associated with the update information.

Claim 3. The method according to claim 1, further comprising storing update information in at least a portion of memory in the electronic device.

Claim 4. The method according to claim 1, further comprising communicating queries regarding availability of update information from the electronic device to a server.

Claim 5. The method according to claim 1, further comprising retrieving the update information and a list of names of converter utilities in a single retrieval operation.

Claim 6. The method according to claim 1, wherein the at least one of firmware and software comprises a plurality of software applications, and each of the plurality of software applications is associated with a corresponding converter utility.

Claim 7. The method according to claim 6, wherein the update information is capable of updating a plurality of software applications in a single update event.

Claim 8. The method according to claim 1, further comprising generating an update package reference, the update package reference at least comprising:

 an update package location memory reference; and

 a list of names of converter utilities memory reference.

Claim 9. The method according to claim 1, further comprising determining whether one of a firmware and a software update is necessary, wherein if it is determined that an update is not necessary, then performing a reboot operation.

Claim 10. The method according to claim 1, further comprising determining whether one of a firmware and a software update is necessary, wherein if it is determined that an update is necessary, then:

- retrieving data from an update package reference;
- verifying authenticity of the update information;
- updating at least one of firmware and software;
- executing at least one converter utility associated with the at least one application software;
- communicating an update confirmation to at least one external system; and
- performing a reboot operation.

Claim 11. The method according to claim 10, wherein executing at least one converter utility associated with the at least one application software comprises retrieving and updating associated security information.

Claim 12. The method according to claim 11, wherein retrieving and updating associated security information comprises retrieving an authorization related object and associating it with the at least one application software.

Claim 13. The method according to claim 11, further comprising:
retrieving a list of security information associated with the update information;
and

installing the security information after updating the at least one of firmware and software.

Claim 14. The method according to claim 10, wherein executing at least one converter utility associated with the at least one application software comprises converting security information comprising authentication and authorization information.

Claim 15. The method according to claim 10, wherein executing at least one converter utility associated with the at least one application software comprises converting subscription information.

Claim 16. The method according to claim 10, wherein the at least one of firmware and software comprises a plurality of software applications, and the at least one converter utility comprises a plurality of converter utilities, each converter utility being associated with a corresponding application software.

Claim 17. The method according to claim 16, wherein each of the software applications for which an update was determined to be necessary is updated in a single update event.

Claim 18. The method of claim 17, wherein executing at least one converter utility associated with the at least one of firmware and software further comprises converting data associated with each software application in a single conversion event.

Claim 19. A system for updating an electronic device, the system comprising:
an update agent for coordinating updating of at least one of firmware and software in the electronic device using update information; and
a converter for invoking a converter utility associated with the at least one of firmware and software and for converting data associated with the at least one of firmware and software to a form compatible with an updated version of the at least one of firmware and software.

Claim 20. The system according to claim 19, further comprising a communication layer for communicating a list of names of converter utilities associated with the update information and communicating queries regarding availability of update information from the electronic device to a server.

Claim 21. The system according to claim 20, wherein the communication layer is adapted to communicate the update information and the list of names of converter utilities in a single communication event.

Claim 22. The system according to claim 19, wherein the electronic device comprises memory for storing update information.

Claim 23. The system according to claim 19, wherein the at least one of firmware and software comprises a plurality of software applications and each of the software applications is associated with a corresponding converter utility.

Claim 24. The system according to claim 23, wherein the update information is adapted to update a plurality of software applications in a single update event.

Claim 25. The system according to claim 19, further comprising a placement layout table for mapping a memory location of update information, the placement layout table at least mapping an update information memory location and a list of names of converter utility memory location.

Claim 26. The system according to claim 19, further comprising means for determining whether an update of one of firmware and software is necessary, wherein if it is determined that an update is not necessary, then the electronic device performs a reboot operation.

Claim 27. The system according to claim 19, further comprising means for determining whether an update of the at least one of firmware and software is necessary, wherein if it is determined that an update is necessary, then:

the update agent retrieves data from an update package reference, verifies authenticity of the update information, updates the at least one of firmware and software;

the converter executes at least one converter utility associated with the at least one of firmware and software;

the communication layer communicates an update confirmation to at least one external system; and

the electronic device performs a reboot operation.

Claim 28. The system according to claim 27, wherein the at least one of firmware and software comprises a plurality of software applications, and the at least one converter utility comprises a plurality of converter utilities, each converter utility being associated with a corresponding software application.

Claim 29. The system according to claim 28, wherein the update agent is adapted to update each of the software applications for which an update was determined to be necessary in a single update event.

Claim 30. The system according to claim 29, wherein the converter executes at least one converter utility associated with the at least one software application and converts data associated with each of the at least one software application in a single conversion event.

Claim 31. The system according to claim 19, further comprising:
the converter converts security data associated with the at least one of firmware and software, the converted security data enabling access to the updated version of the at least one of firmware and software.

Claim 32. The system according to claim 21, further comprising a communication layer, the communication layer communicating converter utilities, the converter utilities adapted to converting security data and access control information associated with the update information, and the communication layer also communicating information associated with the updated security data and access control information from the electronic device to a server.

Claim 33. The system according to claim 32, wherein a converter utility invokes downloading of update information and firmware/software update information.

Claim 34. The system according to claim 19, wherein security information is updated after a software/firmware update has been performed.

Claim 35. The system according to claim 19, wherein an application is updated when data associated with the application changes.